

BATCH

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/626,731

DATE: 10/04/2000
 TIME: 14:32:26

Input Set : A:\626731.txt
 Output Set: N:\CRF3\10042000\I626731.raw

ENTERED

```

4 <110> APPLICANT: Co, Man Sung
5   Vasquez, Maximiliano
6   Carreno, Beatriz
7   Celniker, Abbie Cheryl
8   Collins, Mary
9   Goldman, Samuel
10  Gray, Gary S.
11  Knight, Andrea
12  O'Hara, Denise
13  Rup, Bonita
14  Veldman, Geertruida M.
16 <120> TITLE OF INVENTION: HUMANIZED IMMUNOGLOBULIN REACTIVE WITH
17   B7-2 AND METHODS OF TREATMENT THEREWITH
20 <130> FILE REFERENCE: GI-5315
22 <140> CURRENT APPLICATION NUMBER: 09/626,731
23 <141> CURRENT FILING DATE: 2000-07-27
25 <150> PRIOR APPLICATION NUMBER: 09/249,011
26 <151> PRIOR FILING DATE: 1999-02-12
28 <160> NUMBER OF SEQ ID NOS: 20
30 <170> SOFTWARE: FastSEQ for Windows Version 3.0
32 <210> SEQ ID NO: 1
33 <211> LENGTH: 405
34 <212> TYPE: DNA
35 <213> ORGANISM: Murine anti-B7-2 heavy chain
37 <220> FEATURE:
38 <221> NAME/KEY: CDS
39 <222> LOCATION: (1)...(405)
40 <223> OTHER INFORMATION:
47 <400> SEQUENCE: 1
48   atg ggt tgg aac tgt atc atc ttc ttt ctg gtt aca aca gct aca ggt      48
49   Met Gly Trp Asn Cys Ile Ile Phe Phe Leu Val Thr Thr Ala Thr Gly
50   1                               5           10           15
52   gtg cac tcc cag gtc cag ctg cag cag tct ggg cct gag ctg gtg agg      96
53   Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Arg
54   1                               20           25           30
56   cct ggg gaa tca gtg aag att tcc tgc aag ggt tcc ggc tac aca ttc      144
57   Pro Gly Glu Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe
58   35                               40           45
60   act gat tat gct ata cag tgg gtg aag cag agt cat gca aag agt cta      192
61   Thr Asp Tyr Ala Ile Gln Trp Val Lys Gln Ser His Ala Lys Ser Leu
62   50                               55           60
64   gag tgg att gga gtt att aat att tac tat gat aat aca aac tac aac      240
65   Glu Trp Ile Gly Val Ile Asn Ile Tyr Tyr Asp Asn Thr Asn Tyr Asn
66   65                               70           75           80
68   cag aag ttt aag ggc aag gcc aca atg act gta gac aaa tcc tcc agc      288
69   Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser
70   85                               90           95

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10/4/00

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72  aca gcc tat atg gaa ctt gcc aga ttg aca tct gag gat tct gcc atc      336
73  Thr Ala Tyr Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile
74      100      105      110
76  tat tac tgt gca aga gcg gcc tgg tat atg gac tac tgg ggt caa gga      384
77  Tyr Tyr Cys Ala Arg Ala Ala Trp Tyr Met Asp Tyr Trp Gly Gln Gly
78      115      120      125
80  acc tca gtc acc gtc tcc tca      405
81  Thr Ser Val Thr Val Ser Ser
82      130      135
85 <210> SEQ ID NO: 2
86 <211> LENGTH: 135
87 <212> TYPE: PRT
88 <213> ORGANISM: Murine anti-B7-2 heavy chain
90 <400> SEQUENCE: 2
91  Met Gly Trp Asn Cys Ile Ile Phe Phe Leu Val Thr Thr Ala Thr Gly
92      1      5      10      15
93  Val His Ser Gln Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Arg
94      20      25      30
95  Pro Gly Glu Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe
96      35      40      45
97  Thr Asp Tyr Ala Ile Gln Trp Val Lys Gln Ser His Ala Lys Ser Leu
98      50      55      60
99  Glu Trp Ile Gly Val Ile Asn Ile Tyr Tyr Asp Asn Thr Asn Tyr Asn
100     65      70      75      80
101  Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser
102      85      90      95
103  Thr Ala Tyr Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile
104      100      105      110
105  Tyr Tyr Cys Ala Arg Ala Ala Trp Tyr Met Asp Tyr Trp Gly Gln Gly
106      115      120      125
107  Thr Ser Val Thr Val Ser Ser
108      130      135
110 <210> SEQ ID NO: 3
111 <211> LENGTH: 396
112 <212> TYPE: DNA
113 <213> ORGANISM: Murine anti-B7-2 light chain
115 <220> FEATURE:
116 <221> NAME/KEY: CDS
117 <222> LOCATION: (1)...(396)
119 <400> SEQUENCE: 3
120  atg gat tca cag gcc cag gtt ctt ata ttg ctg ctg cta tgg gta tct      48
121  Met Asp Ser Gln Ala Gln Val Leu Ile Leu Leu Leu Trp Val Ser
122      1      5      10      15
124  ggt acc tgt ggg gac att gtg ctg tca cag tct cca tcc tcc ctg gct      96
125  Gly Thr Cys Gly Asp Ile Val Leu Ser Gln Ser Pro Ser Ser Leu Ala
126      20      25      30
128  gtg tca gca gga gag aag gtc act atg agc tgc aaa tcc agt cag agt      144
129  Val Ser Ala Gly Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser
130      35      40      45

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132 ctg ctc aac agt aga acc cga gag aac tac ttg gct tgg tac cag cag      192
133 Leu Leu Asn Ser Arg Thr Arg Glu Asn Tyr Leu Ala Trp Tyr Gln Gln
134      50      55      60
136 aaa cca ggg cag tct cct aaa ctg ctg atc tac tgg gca tcc act agg      240
137 Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg
138      65      70      75      80
140 gaa tct ggg gtc cct gat cgc ttc aca ggc agt gga tct ggg aca gat      288
141 Glu Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp
142      85      90      95
144 ttc act ctc acc atc agc agt gtg cag gct gaa gac ctg gca gtt tat      336
145 Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr
146      100      105      110
148 tac tgc acg caa tct tat aat ctt tac acg ttc gga ggg ggg acc aag      384
149 Tyr Cys Thr Gln Ser Tyr Asn Leu Tyr Thr Phe Gly Gly Gly Thr Lys
150      115      120      125
152 ctg gaa ata aaa      396
153 Leu Glu Ile Lys
154      130
157 <210> SEQ ID NO: 4
158 <211> LENGTH: 132
159 <212> TYPE: PRT
160 <213> ORGANISM: Murine anti-B7-2 light chain
162 <400> SEQUENCE: 4
163 Met Asp Ser Gln Ala Gln Val Leu Ile Leu Leu Leu Trp Val Ser
164      1      5      10      15
165 Gly Thr Cys Gly Asp Ile Val Leu Ser Gln Ser Pro Ser Ser Leu Ala
166      20      25      30
167 Val Ser Ala Gly Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser
168      35      40      45
169 Leu Leu Asn Ser Arg Thr Arg Glu Asn Tyr Leu Ala Trp Tyr Gln Gln
170      50      55      60
171 Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg
172      65      70      75      80
173 Glu Ser Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp
174      85      90      95
175 Phe Thr Leu Thr Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr
176      100      105      110
177 Tyr Cys Thr Gln Ser Tyr Asn Leu Tyr Thr Phe Gly Gly Gly Thr Lys
178      115      120      125
179 Leu Glu Ile Lys
180      130
182 <210> SEQ ID NO: 5
183 <211> LENGTH: 405
184 <212> TYPE: DNA
185 <213> ORGANISM: Humanized murine anti-human B7-2 heavy chain
187 <220> FEATURE:
188 <221> NAME/KEY: CDS
189 <222> LOCATION: (1)...(405)
191 <400> SEQUENCE: 5

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192 atg ggt tgg aac tgt atc atc ttc ttt ctg gtt acc aca gct aca ggt      48
193 Met Gly Trp Asn Cys Ile Ile Phe Phe Leu Val Thr Thr Ala Thr Gly
194 1      5      10      15
196 gtg cac tcc cag gtc cag ctg gtg cag tct ggg gct gag gtg aag aag      96
197 Val His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
198      20      25      30
200 cct ggg agc tca gtg aag gtg tcc tgc aaa gct tcc ggc tac aca ttc      144
201 Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
202      35      40      45
204 act gat tat gct ata cag tgg gtg aga cag gct cct gga cag ggc ctc      192
205 Thr Asp Tyr Ala Ile Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
206      50      55      60
208 gag tgg att gga gtt att aat att tac tat gat aat aca aac tac aac      240
209 Glu Trp Ile Gly Val Ile Asn Ile Tyr Tyr Asp Asn Thr Asn Tyr Asn
210      65      70      75      80
212 cag aag ttt aag ggc aag gcc aca atg act gta gac aag tcg acg agc      288
213 Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Thr Ser
214      85      90      95
216 aca gcc tat atg gaa ctt agt tct ttg aga tct gag gat acg gcc gtt      336
217 Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
218      100      105      110
220 tat tac tgt gca aga gcg gcc tgg tat atg gac tac tgg ggt caa ggt      384
221 Tyr Tyr Cys Ala Arg Ala Ala Trp Tyr Met Asp Tyr Trp Gly Gln Gly
222      115      120      125
224 acc ctt gtc acc gtc tcc tca      405
225 Thr Leu Val Thr Val Ser Ser
226      130      135
229 <210> SEQ ID NO: 6
230 <211> LENGTH: 135
231 <212> TYPE: PRT
232 <213> ORGANISM: Humanized murine anti-human B7-2 heavy chain
233 <400> SEQUENCE: 6
235 Met Gly Trp Asn Cys Ile Ile Phe Phe Leu Val Thr Thr Ala Thr Gly
236 1      5      10      15
237 Val His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
238      20      25      30
239 Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
240      35      40      45
241 Thr Asp Tyr Ala Ile Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
242      50      55      60
243 Glu Trp Ile Gly Val Ile Asn Ile Tyr Tyr Asp Asn Thr Asn Tyr Asn
244      65      70      75      80
245 Gln Lys Phe Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Thr Ser
246      85      90      95
247 Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
248      100      105      110
249 Tyr Tyr Cys Ala Arg Ala Ala Trp Tyr Met Asp Tyr Trp Gly Gln Gly
250      115      120      125
251 Thr Leu Val Thr Val Ser Ser

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254 <210> SEQ ID NO: 7
255 <211> LENGTH: 396
256 <212> TYPE: DNA
257 <213> ORGANISM: Humanized murine anti-human B7-2 light chain
259 <220> FEATURE:
260 <221> NAME/KEY: CDS
261 <222> LOCATION: (1)...(396)
263 <400> SEQUENCE: 7
264 atg gat tca cag gcc cag gtt ctt ata ttg ctg ctg cta tgg gta tct      48
265 Met Asp Ser Gln Ala Gln Val Leu Ile Leu Leu Leu Trp Val Ser
266 1      5      10      15
268 ggc acc tgt ggg gac att gtg ctg aca cag tct cca gat tcc ctg gct      96
269 Gly Thr Cys Gly Asp Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ala
270 20      25      30
272 gta agc tta gga gag agg gcc act att agc tgc aaa tcc agt cag agt      144
273 Val Ser Leu Gly Glu Arg Ala Thr Ile Ser Cys Lys Ser Ser Gln Ser
274 35      40      45
276 ctg ctc aac agt aga acc cga gag aac tac ttg gct tgg tac cag cag      192
277 Leu Leu Asn Ser Arg Thr Arg Glu Asn Tyr Leu Ala Trp Tyr Gln Gln
278 50      55      60
280 aaa cca ggg cag cct cct aaa ctg ctg atc tac tgg gca tcc act agg      240
281 Lys Pro Gly Gln Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg
282 65      70      75      80
284 gaa tct ggg gtc cct gat cgc ttc agt ggc agt gga tct ggg aca gat      288
285 Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp
286 85      90      95
288 ttc act ctc acc atc agc agt ctg cag gct gaa gac gtg gca gtt tat      336
289 Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr
290 100      105      110
292 tac tgc acg caa tct tat aat ctt tac acg ttc gga cag ggg acc aag      384
293 Tyr Cys Thr Gln Ser Tyr Asn Leu Tyr Thr Phe Gly Gln Gly Thr Lys
294 115      120      125
296 gtg gaa ata aaa      396
297 Val Glu Ile Lys
298      130
301 <210> SEQ ID NO: 8
302 <211> LENGTH: 132
303 <212> TYPE: PRT
304 <213> ORGANISM: Humanized murine anti-human B7-2 light chain
306 <400> SEQUENCE: 8
307 Met Asp Ser Gln Ala Gln Val Leu Ile Leu Leu Leu Trp Val Ser
308 1      5      10      15
309 Gly Thr Cys Gly Asp Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ala
310 20      25      30
311 Val Ser Leu Gly Glu Arg Ala Thr Ile Ser Cys Lys Ser Ser Gln Ser
312 35      40      45
313 Leu Leu Asn Ser Arg Thr Arg Glu Asn Tyr Leu Ala Trp Tyr Gln Gln
314 50      55      60

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VERIFICATION SUMMARY

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